

10 - 12 December 2024

UniBw AI Retreat 2024

Building an UniBw AI network



hosted in cooperation with

George C. Marshall European
Center for Security Studies (GCMC)



The retreat aims to provide doctoral students in machine learning and artificial intelligence with a platform for technical and applied-level exchange and networking.

Public sector researchers have the possibility to engage with AI PhD students to exchange insights on methodologies and real-world applications.

Registration

PhD Students:

Please apply with an abstract and (optionally) with a poster of your PhD thesis *or* a current research project (published or unpublished).

Senior Researchers/Public Sector participants:

Please indicate your research interests during registration.

Please register at https://go.unibw.de/ubair2024

A passport or EU ID card is required for admission. After registering on the above page, you will be asked to enter this and other data on the Marshall Center registration page.

The retreat is free of charge. Lunch, dinner and the excursion must be paid for by the participants themselves. Please take care of your own travel expenses, transport and accommodation.

Hosts and Sponsors

Machine Learning Interest Group (MLIG)













E=Entrance, D=Dining Facility (DFAC)

Event Location

George C. Marshall European Center for Security Studies Gernackerstraße 2 82467 Garmisch-Partenkirchen

Contact

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Philipp J. Rösch Event Organizer University of the Bundeswehr Munich philipp.roesch@unibw.de

Universität München

Tuesday, 10 December 2024

0800 - 0830 Arrival at GCMC 0830 - 0930 Registration / Coffee 0930 - 0945 Welcoming Remarks

Gen. Barre Seguin, Director, George C. Marshall Center **Dr. Bernard Finel**, Dean, College of International Security Studies (CISS), George C. Marshall Center **Philipp J. Rösch**, MLIG, University of the Bundeswehr Munich

0945 - 1000 Round of Introductions

1000 – 1130 Talk 1: Setting the Policy Scene: AI and Security.

Security-related challenges and opportunities arising from the rapid development of AI technology

<u>Dr. Sae Schatz</u>, Director, Partnership for Peace Consortium of Defense Academies and Security Studies Institutes

Professor Dr. Scott Handler, Professor of Cyber Studies, George C. Marshall Center

Moderation: **Professor Dr. May-Britt U. Stumbaum**, Professor of Security Studies and Strategic Competition, George C. Marshall Center

1130 - 1300	Lunch @ DFAC (optional)
1300 - 1345	Poster Session 1 (Security-related)
1345 - 1430	Poster Session 2
1430 - 1500	Coffee Break
1500 - 1545	Poster Session 3
	Poster Post-Discussion (particularly together with GCMC Faculty)
1630 - 1800	Ice-Breaker (hosted by GCMC)

Dinner @ DFAC (optional)

Wednesday, 11 December 2024

0745 - 0800 Coffee / Morning Intro

0800 - 0930 PyTorch Tutorial, Part 1

<u>**Dr. Thomas Viehmann**</u>, Principal Research Engineer, Lightning AI and former PyTorch Core Developer

Optimization: training runs and PyTorch models itself Transformers, training strategies, quantization Extending PyTorch and export, PyTorch on device

0930 - 1000 Coffee Break

1000 - 1130 PyTorch Tutorial, Part 2

1130 - 1300 Lunch @ DFAC (optional)

1300 – 1430 Talk 2: Far-Right Extremism and Terrorism tba

Claudia Wallner, Research Fellow, Terrorism and Conflict research group, and Co-Leader, Far-Right Extremism and Terrorism (FRET) research program, Royal United Services Institute (RUSI)

Moderation: <u>LTC Arne Lossmann</u>, Deputy Director, Program for Cybersecurity Studies, George C. Marshall Center

1500 – 1800 Optional Excursion to Christkindlmarkt

1800 Dinner @ DFAC (optional)

Thursday, 12 December 2024

0830 – 1000 Open Science Course, Part 1

<u>Dr. Carolina Natel de Moura</u>, Digital Research Academy, Postdoctoral Researcher, Institute of Meteorology and Climate Research, Karlsruhe Institute of Technology

Fears and difficulties of working open Organizing files and folders Reproducible research practices Publication of research output 1000 – 1030 Coffee Break

1030 – 1130 Open Science Course, Part 2

1130 – 1245 Concluding Panel Discussion: "Geopolitical Challenges and Strategic Competition: Artificial Intelligence and Global Security".

Amidst Strategic Competition and rising geopolitical challenges, the focus will be on the US, EU and like-minded as well as on China and Russia, two nations that are important both as innovative pioneers and geopolitical players. Experts from the fields of defense, technology and politics discuss the impact of AI on global security strategies, cyber warfare and international stability: How does AI influence the balance of power between nations? What risks does the military use of AI entail? Can international cooperation mitigate the security threats posed by AI? What are the benefits of AI for Western forces? What role do research institutions play in AI for military applications worldwide?

<u>Dr. Sae Schatz</u>, Director, Partnership for Peace Consortium of Defense Academies and Security Studies Institutes

Professor Dr. Scott Handler, Professor of Cyber Studies, George C. Marshall Center

Professor Dr. Oliver Rose, Professor of Modelling and Simulation, University of the Bundeswehr Munich

<u>Professor Dr. Gary S. Schaal</u>, Professor of Political Theory, Defense AI Observatory (DAIO), Helmut Schmidt University

Moderation: **Professor Dr. May-Britt U. Stumbaum**, Professor of Security Studies and Strategic Competition, George C. Marshall Center

1245 – 1300 Farewell remarks Leadership, George C. Marshall Center (tbd)

1300 Lunch @ DFAC (optional), individual departures